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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,578	03/29/2004	Marion Beckmann	514413-3936.1	2069
20999	7590	08/29/2006	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			RAO, DEEPAK R	
			ART UNIT	PAPER NUMBER
			1624	

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/811,578

Applicant(s)

BECKMANN ET AL.

Examiner

Deepak Rao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 ~~is/are~~ are pending in the application.
- 4a) Of the above claim(s) 20 is/~~are~~ withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 8, 10 and 14-19 ~~is/are~~ are rejected.
- 7) ☒ Claim(s) 4, 6, 7, 9 and 11-13 ~~is/are~~ are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/246,220.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20040329.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claims 1-20 are pending in this application.

Election/Restriction

Applicant's election with traverse of Group I, claims 1-19 (drawn to compounds of formula (I) or (II) wherein X is =CH-) in reply filed on June 15, 2006 is acknowledged. The traversal is on the ground(s) that the restriction is improper. This is not found persuasive because the compounds of Groups I and II are structurally dissimilar and are not art recognized equivalents. They are structurally dissimilar such that a reference anticipating a compound of Group I (i.e., pyridinyl compounds) may not render the compounds of Group II (pyrimidinyl) obvious or vice-versa. 37 CFR 1.141(a) provides that two or more independent and distinct inventions may not be claimed in one application, whether or not the misjoinder occurred in one claim or more than one claim. Restriction is going to be exercised where independent and distinct inventions are presented in one Markush grouping. Independent means when the compound is being made and/or used alone, not in combination with other compounds of the Markush expression. Restriction is considered proper in Markush claims where the members are so diverse and unrelated that a prior art reference anticipating the claim with respect to one of the members, would not render the claims obvious under 35 U.S.C. 103 with respect to the other members. Therefore, what should be considered for patentable distinctness is the compound as a whole. Each of the groups are classified separately and further, the compounds of Groups I-II require separate searches in the literature and therefore, it is burdensome for the examiner.

Group III is different for the reasons provided in the previous office action, and further, the process of preparation according to Group III is not of the same scope as the products of Group I. Group III is drawn to a process of preparation of a structurally distinct compound (i.e., formula VIII) and therefore, the search and examination would be based on the novelty and unobviousness of the product. Thus, it requires separate burdensome search in various databases. Applicant's argument based on MPEP 821.04 (Rejoinder) has been fully considered. As submitted by the applicant, the rejoinder is applicable to process claims which depend from or otherwise include all the limitations of the allowable product claim. In the instant situation, the process of Group III is drawn to a different product (i.e., compound of formula VIII) which is structurally distinct from the product of Groups I and II.

The requirement is still deemed proper and is therefore made FINAL.

Claim 20 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 8.

Applicant's election of the species of N-cyclohexylthio-(4-trifluoromethyl)nicotinamide is acknowledged. As the elected species was not found in the prior art, the search and examination was expanded to the elected invention of Group I.

Claim Objections

1. Claim 13 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

2. Claim 3 is objected to because of the following informalities:

The claim is drawn to 'a compound of formula (I)', however is dependent on claim 7. A claim in dependent form should refer to a claim previously set forth. From the preamble, it is clear that applicant intends claim 3 to depend from claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation "R⁸ being as defined in claim 6" in lines 6-7. There is insufficient antecedent basis for this limitation in claim 2 on which claim 8 is dependent via claim 6. Claims 2 or 6 do not provide a definition for the variable R⁸.

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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1. Claims 1, 3, 5 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Tice et al., U.S. Patent No. 6,117,821. The instant claims read on the reference disclosed compounds, see the compounds of Examples 1 and 3. The reference also teaches a process of preparation of the compounds, by reacting a sulfonamide compound of formula (II) with a carbonyl chloride compound of formula (III), see col. 2, lines 24-67. The reference teaches that the carbonyl chloride compound of formula (III) can be prepared by known methods and therefore, inherently teaches the preparation of the compound from the corresponding carboxylic acid and a chlorinating agent.

2. Claims 1, 3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by XP-002228063. The instant claims read on the reference disclosed compound having RN 342371-46-4.

3. Claims 1, 2, 5, 10 and 14-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshida et al., JP 62181261 (1988). The instant claims read on the reference disclosed compounds, see the compounds of formula (I) and the corresponding species of compound no. 11 in page 627. The reference also teaches a process of preparation of the compounds, by reacting a sulfonamide compound of formula (II) with a carbonyl chloride compound of formula (III), see page 624. The reference teaches that the carbonyl chloride compound of formula (III) can be prepared by known methods and therefore, inherently teaches the preparation of the compound from the corresponding carboxylic acid and a chlorinating agent. The reference compounds are disclosed to be useful as agricultural fungicides, see the corresponding CAPLUS Abstract 108:131590.

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4. Claims 2, 15, 17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 580374. The instant claims read on the reference disclosed compounds, see the compounds of formula (I) and the corresponding species in Table 1, compound no. 102 and 105. The instantly claimed compounds are tautomers of reference compounds when R^{4'} is H.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-2, 5, 10 and 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al., JP 3-68550. The reference teaches sulfonamide compounds having insecticidal activity, see formula (I) in page 461 and the species wherein R² is -CO-pyridinyl. (See the corresponding CAPLUS Abstract 115:153116 for the species). The reference compounds are taught to be useful as insecticides, see the CAPLUS Abstract. The reference teaches a process to

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prepare the compounds, see the reaction scheme in page 463. The instant claims recite that the 4-position substituent R^1 is non-hydrogen substituent such as alkyl, etc., for example, a methyl (CH_3) and the reference compounds disclosed compounds are unsubstituted at the analogous position. In other words, the instantly claimed compounds differ from the reference compounds by having a methyl substituent in place of the H in the reference compounds. Therefore, the instantly claimed compounds differ from the reference compounds by a $-CH_2$ group and it is well established that compounds that differ by a $-CH_2$ group are structural homologs. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the reference compounds to prepare the structural homolog. One having ordinary skill in the art would have been motivated to prepare the instantly claimed compounds because such structurally homologous compounds are expected to possess similar properties. It has been held that compounds that are structurally homologous to prior art compounds are *prima facie* obvious, absent a showing of unexpected results. *In re Hass*, 60 USPQ 544 (CCPA 1944); *In re Henze*, 85 USPQ 261 (CCPA 1950).

Allowable Subject Matter

Claims 4, 6-7, 9, 11 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten limited to the examined subgenus as indicated above (i.e., X is $=CH-$), in independent form including all of the limitations of the base claim and any intervening claims.

Receipt is acknowledged of the Information Disclosure Statement filed on March 29, 2004 and a copy is enclosed herewith.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deepak Rao whose telephone number is (571) 272-0672. The examiner can normally be reached on Tuesday-Friday from 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson, can be reached at (571) 272-0661. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Deepak Rao
Primary Examiner
Art Unit 1624

August 24, 2006